

**Abstract**

A process measuring device including: A first processor 21, which  
5 performs a measured value processing with a first algorithm in first  
processing cycles; and a second processor 25, which is responsible  
for coordination and/or communication tasks. The second  
processor 25 reads, in time intervals which are greater than the first  
processing cycle, a control data set from the first processor 21, and  
10 executes the first algorithm on the basis of the control data set, in  
order to verify the correct functioning of the first processor.

(Fig.

2)

**Translation of German words in the drawing**

Fig. 1:

- 5 Change "Sensorelektronik" to --Sensor Electronics--;  
change "Hauptelektronik" to --Main Electronics--;  
change contents of box 11 to  
--Pressure  
measuring  
10 cell  
  
resistive  
or  
capacitive--;  
15 change contents of box 21 to  
--Pressure Processor  
(PSP)--;  
change contents of box 22 to  
--Communications ASIC  
20 (LIPS)--; and  
change contents of box 23 to  
--Display,  
On-Site Interaction--.
- 25 Fig. 2:  
Change "Hauptelektronik" to --Main Electronics--;  
change "serielle Rohdaten" to --Serial Raw Data--;  
change contents of box 21 to  
--Pressure Processor  
30 (ASIC with DSP)--;  
change contents of box 22 to

--Communications

ASIC--;

change "Eingangswerte" to --Input Values--;

change "Zustandsvariablen" to --State Variables--;

5 change "Ausgangswert" to --Output Value--;

change "Befehl: Fehler signalisieren" to

--Command:

Signal Error--; and

change "Selbstüberwachung" to --Self-Monitoring--

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